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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,305	07/30/2001	Yutaka Wada	2001-1079	9053

513 7590 04/23/2003

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WASHINGTON, DC 20006-1021

EXAMINER

MCDONALD, SHANTESE L

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 04/23/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/916,305

Applicant(s)
Wada et al.

Examiner
McDonald, Shantese

Art Unit
3723



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 30, 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 42-47, and 54-104 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 54, 55, 57-70, 82, 83, and 86-95 is/are allowed.
- 6) ☒ Claim(s) 1-8, 42-47, 56, 71-81, 84, 85, 96-99, and 101-104 is/are rejected.
- 7) ☒ Claim(s) 100 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/446,764.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3,6,8 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 56 and 84 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear as to what is meant by “pressing in a container in a manufacturing process of the same”, as stated in line 2.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

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4. Claims 1,2,4-8, 42-47 and 71 are rejected under 35 U.S.C. 102(e) as being anticipated by Somekh.

Somekh teaches a method for polishing an object, the object being a semiconductor wafer having raised and depressed patterns, (col. 6, lines 22-25), by using a holder, 70a, -70d, an abrading surface, 100, and a mechanism for pressing the surface of the object to the abrading surface, (col. 3, lines 54-64), polishing the object by supplying a liquid not containing abrasives, which is water, (col. 3, lines 29-32), and further polishing the object by supplying abrasive particles so as to uniformly remove a specific film thickness, (col. 6, lines 56-67).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 74-76,99 and 101-104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Somekh in view of Southwick

Somekh teaches all the limitations of the claims except for polishing while concurrently dressing the abrading surface with a liquid not containing abrasive particles to thereby generate free abrasive particles. Southwick teaches polishing while concurrently dressing the abrading surface, (col. 10, lines 29-32), with a liquid not containing abrasive particles, (col. 5, line 51- col.6

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line 12). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to provide the method of Somekh with the limitation of dressing the abrading surface with a liquid not containing abrasive particles, as taught by Southwick, in order to enhance the polishing capabilities.

7. Claims 44, 71-73, 77-81, and 96-98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Somekh.

Somekh teaches all the limitations of the claims except for the first liquid comprising ionized water, the pressure between the abrading surface and the dresser being less than 110 g/cm², and being less than 50 g/cm², the diamond particles being #200, the liquid including a buffer solution, a surface activator solution, an oxidizing solution, an reducing solution, and a electrolytic ionized water. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the invention of Somekh with the diamond particles being #200, the first liquid comprising ionized water and a liquid including a buffer solution, a surface activator solution, an oxidizing solution, an reducing solution, and a electrolytic ionized water, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design choice. It would have been further obvious to provide the invention of Somekh with the pressure between the abrading surface and the dresser being less than 110 g/cm², and being less than 50 g/cm², since it has been held that discovering an optimum value as a result effective variable involves only routine skill in the art.

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Allowable Subject Matter

8. Claims 56 and 84 and 85 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. Claim 100 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 54,55,57-70, 82,83,86-95 are allowed.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nanda et al. and Mikhaylich et al. were cited to show other examples of polishers.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shantese McDonald whose telephone number is (703) 308-8722.



Joseph J. Hail, III
Supervisory Patent Examiner
Technology Center 3700

S.L.M.

April 20, 2003